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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,275	01/23/2004	Michael A. Porter	CGL01/0207US8	6183

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EXAMINER	
WEIER, ANTHONY J	

ART UNIT	PAPER NUMBER
1761	

DATE MAILED: 07/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/764,275	PORTER ET AL.	
	Examiner	Art Unit	
	Anthony Weier	1761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 May 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *42-64* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *42-64* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 60 and 61 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is not clear what resulting product, the permeate or protein-enriched retentate (which are separated), is considered to be the "modified oilseed material" called for in the preamble.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 42-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lawhon et al (U.S. Patent No. 5086166) taken together with Hodgins et al (U.S. Patent No. 4906379).

Lawhon et al discloses a proteinaceous oil seed composition produced by a continuous multistage process that includes alkaline extraction (e.g. 60 C / pH 8) of ground soybeans to provide an extract which is then treated by centrifugation to

remove insoluble material followed by passing the resulting extract (or low-fat protein-rich portion of same) through an ultrafiltration stage at a cutoff of 50,000 daltons (or as high as 100,000 daltons). It is expected that to achieve same the membrane would have the particular pore size called for in instant claims 54. Lawhon et al discloses a final extraction stage with an aqueous solution having a pH of 9.0 with sodium hydroxide (col. 12). Lawhon et al further discloses treating the permeate thereof to reverse osmosis (see Figure 1) and diafiltering the retentate of the ultrafiltration stage. Lawhon et al also treats the original retentate to a high temperature for 15 minutes (see col. 8) such that same would inherently pasteurize the retentate. In addition, Lawhon et al discloses the preparation of a protein-enriched retentate having 96.64% protein on a dry basis (Tables 6). In addition, Lawhon et al discloses adding water to the extract as at the beginning of the ultrafiltration step wherein the same rate at which the permeate is removed the feed volume is maintained at a constant level. Lawhon et al further discloses the use of a diafiltration step wherein same would inherently provide a retentate rich in protein and a permeate. Lawhon et al also discloses heating the retentate to for 10 to 15 minutes at about 95.degree. to 98.degree. C. wherein such conditions would inherently pasteurize same. With respect to claim 65, Lawhon discloses a first permeate (24) and second permeate as a result of a diafiltration step wherein the two permeates are then treated to reverse osmosis (see Figure 1, Example 5).

Lawhon et al is silent regarding employing a microporous membrane as called for in the instant claims wherein same is furthermore designed for exposure to high

temperatures of 75 C or more, pH ranging from 2-11, and capable of withstanding treatment with an oxidizing solution. However, Hodgins et al teaches these particular membranes as called for in the instant claims (temperature as high as 90 C in forming same, col. 8; pH treatment of 2-12, claim 7) and membranes having the contact angle as called for (as a feature to avoid fouling; see col. 2, lines 30-52). It is expected that the membrane of Hodgins would be capable of withstanding treatment with an oxidizing solution due to its similarity with the membrane employed in the instant invention. It would have been obvious to one having ordinary skill in the art at the time of the invention to have prepared a composition as claimed by employing these types of membranes as a matter of choice and to have employed same with the particular contact angle for the reasons set forth in Hodgins et al.

Lawhon et al is silent concerning the particular transmembrane pressure employed in preparing the particular composition. However, such determination would have been well within the purview of one having ordinary skill in the art at the time of the invention, and it would have been further to have produced said composition by arriving at such pressure values through routine experimental optimization.

Lawton et al is silent regarding counter-current extraction as called for , for example, in claim 50. However, extraction by such means is a notoriously well known mode of operation, and, absent a showing of unexpected results, it would have been further obvious to have incorporated same as an art recognized alternative extracting mode.

Lawhon et al is silent regarding heating the slurry of soybean material to specifically 20 C to 35 C to provide a mixture of particular matter in the extract solution. Absent a

showing of unexpected results, it would have been further obvious to have prepared such a composition by employing 20-35 C as a matter of choice within the range disclosed by Lawhon et al.

Although Lawhon et al is silent regarding the use of oilseed composition in frozen desserts, specifically, Lawhon et al discloses said composition as a food ingredient in general. It would have been further obvious to have included same for its recognized utility in a variety of food products including frozen desserts as a matter of preference.

The claims further call for the extent of concentrating the retentate by a factor of at least 2.5 relative to the original volume. Although Lawhon et al discloses concentrating, same is silent regarding concentrating by ultrafiltration to such degree. However, Lawhon et al does disclose that the longer the protein isolate is left in the system, the more concentrated it becomes. Such determination would have been well within the purview of a skilled artisan, and it would have been further obvious to have arrived at such value as a result effective variable depending on the extent of concentrated product desired.

The claims further call for the protein enriched retentate to have no more than 7000 mg/kg sodium ions. However, such determination would have been well within the purview of a skilled artisan depending on, for example, the extent of diafiltration employed. It would have been further obvious to have arrived at such amount as a result effective variable.

Claim 22 further calls for the clarified extract to have a solids content of at least 5 wt%. Although Lawhon et al is silent as to the amount of solids therein, such

determination would have been well within the purview of a skilled artisan, and, it would have been further obvious to have attained such amount through manipulation of the centrifugation step as a result effective variable.

The claims further call for the extraction contact time being no more than about 20 minutes (e.g. claim 30). Although Lawhon et al is silent as to contact time, such determination would have been well within the purview of a skilled artisan, and, it would have been further obvious to have attained such as a matter of preference.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 60 and 61 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over either claims 1-14, 20,

and 45-47 of copending Application No. 10/722359 or claims 1-8 and 10-16 of copending Application No. 10/432094.

The instant claims are generic to or fully encompass the claims of said copending application. In particular, the claims of the copending application recite a product is more specific than that of the instant invention but well within the scope of same.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

7. Claims 60 and 61 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-24 of U.S. Patent No. 6841184.

The instant claims are generic to or fully encompass the claims of said copending application. In particular, the claims of the copending application recite a product is more specific than that of the instant invention but well within the scope of same.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Weier whose telephone number is 571-272-1409. The examiner can normally be reached on Monday-Thursday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Anthony Weier
Primary Examiner
Art Unit 1761

Anthony Weier
July 20, 2006

7/20/06